Reviewer's report

Title: Impact of elevated maternal HIV viral load at delivery on T-cell populations in HIV exposed uninfected infants in Mozambique

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Reviewer: Susanne Dam Nielsen

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This manuscript by De Deus et al describes T cell subsets in 1 month old HIV exposed uninfected (HEU) infants compared to HIV unexposed infants. The study was conducted in Mozambique. Furthermore, the impact of ongoing viral replication in the mother of HEU infants is investigated. Major findings are comparable percentage of naive and memory CD4 and CD8 cells in the 2 groups. Infants born to mothers with high viral load had evidence of higher level of CD8 immune activation.

The concept of studying immunological outcome in HUE is not new, and the authors correctly refer to several previous studies. However, most studies have been conducted in industrialized countries, and a study conducted in Africa must be applauded.

I have a few minor essential revisions/concerns:

1: Malaria is a common disease in Africa and may affect immunology. This point needs discussion.

2: The method used for determination of naive and memory CD4 and CD8 cells is no longer gold standard. The authors already argue for the use of a suboptimal method in the discussion. However, I suggest a discussion of the possible implications of the choice of method on the results.

3: The authors discuss the inconsistency in results obtained in previous studies regarding possible perturbations in T cells subsets in HEU. Is it possible that the time point for examination of the infants is of importance? The present study examined infants at one month of age, and possible perturbations at birth may have normalized?

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare I have no competing interests